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Cooperative Economic Insect Report

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PLANT PROTECTION AND QUARANTINE PROGRAMS
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ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
NEW PEST DETECTION AND SURVEY STAFF

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Service serves as a clearing house and does not assume responsibility for accuracy of the material.

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COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

ARMYWORM moths observed in Oklahoma and Virginia, increased in light traps in Mississippi. GREENBUG heavy on wheat in Oklahoma Panhandle, activity increased in wheat in some Texas Panhandle counties. (pp. 313, 326).

ALFALFA WEEVIL eggs hatched in West Virginia, larvae becoming large enough to cause serious damage to alfalfa in Virginia. Larvae increased rapidly in southeast Kansas alfalfa, terminal infestations heavy in Oklahoma, and activity increased in southeast counties of Texas Panhandle. (pp. 315-316).

PECAN CARPENTERWORM infestation heaviest ever noted on pecans in southwest Alabama. (p. 318).

HORN FLY increased on livestock in Coastal Bend area of Texas. (p. 320).

Detection

New State records include LARGER BLACK FLOUR BEETLE and LESSER MEALWORM in Tennessee (p. 320), PEPPER WEEVIL in North Carolina (p. 317), a PTINID BEETLE in Pennsylvania (p. 320), a SCIARID FLY in Florida (p. 319), SOUTHERN PINE BEETLE in Kentucky (p. 318).

For new island and county records see page 323.

Some First Appearances of the Season

CORN EARWORM larvae, PECAN LEAF PHYLLOXERA infestation, CITRUS WHITEFLY adults, and NANTUCKET PINE TIP MOTH larvae in Alabama. EUROPEAN ALFALFA BEETLE oviposition in West Virginia. BEAN LEAF BEETLE adult in Kentucky. MEXICAN BEAN BEETLE adults and FALL WEBWORM webs in Florida. PEAR PSYLLA egg hatch in Oregon. ELM LEAF BEETLE adults in Oklahoma. FACE FLY adults in Kansas.

Special Reports

Distribution of Mimosa Webworm (map). (p. 324).

Reports in this issue are for week ending April 11 unless otherwise indicated.

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NATIONAL WEATHER SERVICE 30-DAY OUTLOOK

MID-APRIL TO MID-MAY 1975

The National Weather Service's 30-day outlook for mid-April to mid-May is for temperatures to average below seasonal normals west of the Continental Divide, as well as in the northern Great Plains, the upper Mississippi Valley, and New England. Above normal averages are indicated from the southern Great Plains to the south Atlantic coast. In unspecified areas near normal temperatures are in prospect. Precipitation is expected to exceed the median amount over central and southern portions of both the Pacific coast and the Intermountain Region, and in most of the area from the central and northern Great Plains to the middle and north Atlantic coast. Elsewhere less than the median value is indicated.

Weather forecast given here is based on the official 30-day "Resume and Outlook" published twice a month by the National Weather Service. You can subscribe through the Superintendent of Documents, Washington, D.C. 20250. Price $5.00 a year.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

ARMY CUTWORM (Euxoa auxiliaris) - KANSAS - Generally very light in 4 to 6-inch wheat surveyed in Wichita, Greeley, Wallace, Sherman, Cheyenne, and Rawlins Counties. Larval counts per drill row foot ranged from none to highs of 0.7 and 0.6, respectively, in Greeley and Wichita Counties. Larvae appeared to be mostly second and third instars. (Bell).

ARMYWORM (Pseudaletia unipuncta) - OKLAHOMA - Numerous adults noted at lights in Pauls Valley area, Garvin County. (Okla. Coop. Sur.). ALABAMA - All stages light in several wheatfields in Baldwin and Wilcox Counties. (Coats et al.). VIRGINIA - Adults on wing in Montgomery County. (Allen).

BEET LEAFHOPPER (Circulifer tenellus) - CALIFORNIA - Treatments in San Joaquin Valley began on or about April 1 at Coalinga, Fresno County, and Taft, Kern County. Areas noted in both districts where annual hosts drying and leafhoppers maturing. Treatments will begin in these advanced areas and work into other areas. Population, for most part, below normal in all areas surveyed. Overwintering females still found in most areas checked. Total of 7,194 acres treated in Kern County and 1,200 acres treated in Kings County. (Cal. Coop. Rpt.).

CORN EARWORM (Heliothis zea) - ALABAMA - First larvae of season (second to third instars) ranged 2-3 per 10 sweeps in crimson clover in Baldwin and Wilcox Counties. One adult observed ovipositing on clover in Macon County. (McQueen).

GREENBUG (Schizaphis graminum) - KANSAS - None found in 4 to 6-inch wheat surveyed in Saline, Wichita, Greeley, Wallace, Sherman, Cheyenne, and Rawlins Counties. (Bell). ARKANSAS - Counts continued low, only occasional aphid found in northwest area small grains. (Boyer). OKLAHOMA - Heavy infestations present in wheat in Texas, Beaver, Harper, and Ellis Counties; ranged 50-2,000 per linear foot in Ellis County and 5-4,000 per linear foot in Texas County. Many fields treated as weather permits, but dryland fields in Panhandle not treated due to dry conditions. Populations ranged 0-300 per linear foot in Beckham and Washita Counties, and 0-120 per linear foot and decreasing in southwest counties. Moderate in Comanche County. Ranged 0-8 per linear foot in fields in Payne, Logan, Canadian, Grady, McClain, Pottawatomie, and Garvin Counties except one field in Canadian County which averaged 90 per linear foot and one in Pottawatomie County which averaged 42 per linear foot. (Okla. Coop. Sur.).

TEXAS - Greenbug activity increased in some panhandle counties. In Lipscomb County some wheat required chemical treatment to prevent economic damage. Very few fields received treatment in Sherman County, but infestations increased in some fields. (Clymer). NEW MEXICO - Populations of this species and Rhopalosiphum maidis (corn leaf aphid) increased in small grains in some areas of southeastern counties. More than 100 per linear foot of both species noted at one field near Lovington, Lea County. Lady beetle adults and larvae ranged 3-4 and 4-6, respectively, in same field. (N.M. Coop. Rpt.).

SPOTTED ALFALFA APHID (Therioaphis maculata) - OKLAHOMA - Occasional specimen noted in one alfalfa field in Canadian County. (Okla. Coop. Sur.).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - ILLINOIS - Overwintering survival in stalks of field corn very high, probably due to rather mild winter. Average survival for 7 of 9 districts surveyed, 87 percent compared to 12-year average of 76 percent. Percent survival by district: Northwest 80, west 71, east 100 (only one field), west-southwest 91, east-southeast 77, southwest 88, and southeast 88. (Ill. Ins. Rpt.).

SOUTHERN CORN ROOTWORM (Diabrotica undecimpunctata howardi) - ALABAMA - Larvae killed 5-7 percent of 5 to 8-inch tall corn in 100-acre Baldwin County field. (Coats et al.).

SMALL GRAINS

ENGLISH GRAIN APHID (Macrosiphum avenae) - ALABAMA - Light, ranged 10-30 per 5 sweeps in wheatfields in Baldwin, Mobile, and Wilcox Counties. (Coats et al.). ARKANSAS - Counts continued low with only occasional aphid found in northwest area small grains. (Boyer).

AN APHID (Rhopalosiphum padi) - OKLAHOMA - Very light, ranged 0-6 per linear foot in wheat in Canadian, Grady, McClain, Pottawatomie, and Garvin Counties. (Okla. Coop. Sur.).

SOUTHERN GREEN STINK BUG (Nezara viridula) - ALABAMA - This species and Euschistus servus (brown stink bug) light, ranged 2-4 per 10 sweeps in oats and wheat in Baldwin, Mobile, and Wilcox Counties. (Coats et al.).

PALE WESTERN CUTWORM (Agrotis orthogonia) - KANSAS - None found in 4 to 6-inch wheat surveyed in Wichita, Greeley, Wallace, Sherman, Cheyenne, or Rawlins Counties. (Bell).

TURF, PASTURES, RANGELAND

SOUTHERN CHINCH BUG (Blissus insularis) - FLORIDA - Built up on St. Augustine grass in Fort Lauderdale area of Broward County; some injury to turf observed April 8. Collected and determined by J.A. Reinert. (Fla. Coop. Sur.).

CHINCH BUG (Blissus leucopterus leucopterus) - INDIANA - Only one specimen taken from 11 likely host grass samples collected in northeast, central, and east-central districts. (Meyer).

FIRE ANT (Solenopsis geminata) - TEXAS - Activity heavy on Burleson County rangeland. (Cole).

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - WEST VIRGINIA - Larvae hatching. Average percent tip infestation noted as follows by county: Berkely 10, Jefferson 24, Morgan 7, and Hampshire 4. (Hacker). VIRGINIA - Based on 14 alfalfa fields sampled (178 acres) during period March 31-April 8, 33.3 percent of tips infested. Average estimated defoliation 1.9 percent. Larvae becoming large enough to cause serious damage. Four fields (29 percent of sample) exceeded economic infestation threshold (25 of 50 tips infested) and 25 percent of acreage exceeded economic threshold. (Allen). TENNESSEE - Up to 14 larvae per 50 alfalfa tips noted in Chester County. (Turpen). Larvae ranged 10-36 per 50 tips in central area fields. (Gordon).

KENTUCKY - Alfalfa weevil larvae averaged 0.6 per tip in newly seeded alfalfa at one location in Graves County; 20 percent of tips infested with 1-2 larvae per tip. Eggs averaged 49.9 per square foot in Warren County March 26; in Fayette County, counts averaged 24.9 per square foot February 27, 16.9 March 31, and ranged 7.0-22.2 April 1. (Barnett, Parr). OHIO - Little activity noted due to low temperatures. Fresh eggs noted in dead stems in Warren County. No larvae observed in Clark, Clinton, Greene, Highland, Warren, and Wayne Counties. (Lewis). ILLINOIS - Percent tip feeding in alfalfa averaged 31 and 23 percent, larvae per 100 tips 45 and 40 in Fayette and Washington Counties, respectively. Tip feeding ranged 0-64 percent, larvae 0-102 per 100 tips in these counties. No tip feeding found in Effingham, Jersey, and Macoupin Counties, 4 percent found in Madison County. Egg counts in 6 study fields decreased greatly from March sampling to April sampling; eggs per square foot averaged 188 March 5, averaged 22 April 3 for these fields. (Ill. Ins. Rpt.).

MISSOURI - H. postica larvae in south-central area alfalfa averaged 3.4 and 5.9 per stem at 2 locations sampled. Controls to be applied next 7 days. (Huggans). Counts in southwest area averaged 0.02, 1.1, and 2.4 larvae per plant at 3 locations sampled. Alfalfa growing very slowly in area, plant height ranged 2-4.3 inches. (Munson). KANSAS - Larvae increased rapidly in alfalfa in most southeast district fields. Up to 11.8 larvae per stem found in Chautauqua County. Fields in southeast will need frequent examinations for damaging infestations. Treatment considered by some growers in area. Fields in southern counties of south-central district had lighter infestations than expected, up to 1.8 larvae per stem noted in one Sumner County field; infestations in area could increase rapidly with warmer weather. Egg hatch occurred as far north and west as Sherman County of northwest district, Ottawa and Clay Counties of north-central district, and Brown County of northeast district. No hatching indicated in Thomas, Cheyenne, and Rawlins Counties of northwest nor Doniphan of northeast. (Bell).

OKLAHOMA - Alfalfa weevil terminal infestations ranged 25-95 percent with 10-40 larvae per square foot in alfalfa in Kiowa, Greer, Jackson, and Tillman Counties, heavy in Comanche County. Damaged terminals average 100 percent with 2-4 larvae per terminal in Custer, Washita, Caddo, and Beckham Counties. Heavy in Pontotoc County (70 percent infestation) and moderate to heavy in Garvin

County. Terminal infestations averaged 76 percent (1-4 larvae per terminal) in Canadian County and 44 percent (1-3 larvae per terminal) in Payne County. Moderate in Garfield County and averaged 80 percent infested (1-6 larvae per terminal) in Kay County. Averaged 75 percent (1-4 larvae per terminal) in Tulsa County. Terminal infestations ranged 15-65 percent in Ellis County, light in Texas County. (Okla. Coop. Sur.).

ARKANSAS - Alfalfa weevil infestations continued at about same level, larvae averaged less than 1 per stem, as previous period in northwest area. About 85 percent of alfalfa stems examined showed feeding signs. Some larvae killed by low temperatures previous period in northwest area. (Dumas). TEXAS - Activity increased with warmer weather; 10-15 per sweep in southeast panhandle counties. Damaged terminals averaged 7 percent with 7 weevils per square foot in Comanche County field. (Clymer, Curtis). UTAH - Lighter than normal at Hurricane, St. George, and Santa Clara areas of Washington County. Alfalfa damaged by frost during early April. (Davis).

CLOVER HEAD WEEVIL (Hypera meles) - ALABAMA - Adults and larvae of various ages ranged 1-5 per 5 sweeps (light) on crimson clover seed heads in Lee, Macon, Montgomery, and Wilcox Counties. (Hardy et al.). MISSISSIPPI - Increased in crimson clover in Oktibbeha County. Mating noted. (Robinson).

PEA LEAF WEEVIL (Sitona lineatus) - IDAHO - Overwintered in alfalfa; becoming active. Populations in Latah County averaged as follows per square meter: 100 near Potlatch, 130 near Moscow, and 300 near Genesee. (Fisher).

EUROPEAN ALFALFA BEETLE (Subcoccinella vigintiquatuorpunctata) - WEST VIRGINIA - Adults fed on bouncing bet in Jefferson, Berkeley, and Morgan Counties. Oviposition noted in Jefferson County. (Hacker).

PEA APHID (Acyrthosiphon pisum) - ARKANSAS - Counts very low for this time of year in northwest area alfalfa with only occasional aphid found. (Boyer). KANSAS - Very heavy infestations noted in scattered Clark County alfalfa fields. Infestations watched closely; some treatment may be necessary. (Bell). OKLAHOMA - Averaged 60 per square foot in Payne County, 4 per square foot in Kay County, 10 per square foot in Canadian County, and light in Garvin County. (Okla. Coop. Sur.). ARIZONA - Heavy in one end of field of alfalfa hay adjacent to mixed weed concentration; field 10 miles south of Safford, Graham County. Beneficial species not building up rapidly enough to affect A. pisum population. Situation unusual for area. (Ariz. Coop. Sur.). UTAH - Up to 10 per sweep noted at Santa Clara, Washington County. Populations lighter at Hurricane. (Davis).

TARNISHED PLANT BUG (Lygus lineolaris) - ALABAMA - Extremely heavy, ranged 2-10 per sweep, in crimson and other clovers along highways and in fields in Lee, Macon, Montgomery, Baldwin, Mobile, and Wilcox Counties. All ages with one or more generations for 1975 completed. (Coats et al.). MISSISSIPPI - Occasional nymph collected in sweeping clover in Oktibbeha County indicates temperatures warm enough for reproduction. (Robinson).

CLOVER MITE (Bryobia praetiosa) - ALABAMA - Ranged 2-15 per leaf on thousands of acres of crimson clover along roads and in fields in Baldwin and Mobile Counties and other southwest areas. (McQueen).

SOYBEANS

BEAN LEAF BEETLE (Cerotoma trifurcata) - KENTUCKY - Adult observed on old soybean stubble in Caldwell County. First report of year. (Barnett et al.).

MISCELLANEOUS FIELD CROPS

PESTS OF SAFFLOWER - ARIZONA - Safflower progress excellent in Salt River and Rainbow Valley areas. Average counts per 100 sweeps of 15-inch safflower plants in Maricopa County: Myzus persicae (green peach aphid) 200, Spanogonicus albofasciatus (a leafhopper) 60, Frankliniella occidentalis (western flower thrips) 200, various species of beneficial wasps 50, Orius spp. (flower bugs) 30. (Ariz. Coop. Sur.).

POTATOES, TOMATOES, PEPPERS

TOMATO PINWORM (Keiferia lycopersicella) - PENNSYLVANIA - Found in greenhouse in Lancaster County March 3. Destroyed about 50 percent of growers tomato crop in fall 1974. (Wheeler).

PEPPER WEEVIL (Anthonomus eugenii) - NORTH CAROLINA - Taken inside bell pepper pod near Dunn, Harnett County, August 15, 1974. Collected by K.A. Sorensen. Determined by R.E. Warner. This is a new State Record. (Hunt).

BEANS AND PEAS

MEXICAN BEAN BEETLE (Epilachna varivestis) - FLORIDA - First 7 adults of season collected from 3 bean fields at Gainesville, Alachua County, April 2. Collected and determined by M. Olesky. (Fla. Coop. Sur.).

COLE CROPS

CABBAGE APHID (Brevicoryne brassicae) - NEVADA - Infestations heavy on collards in Las Vegas area, Clark County. (Zoller).

DECIDUOUS FRUITS AND NUTS

PEAR PSYLLA (Psylla pyricola) - OREGON - Eggs began hatching April 3 in commercial pear orchards in Rogue River Valley. (Berry).

EASTERN TENT CATERPILLAR (Malacosoma americanum) - OKLAHOMA - Small larvae active on wild plums as far north as Payne County. Moderate on fruit trees in Haskell County and light on plum trees in Pontotoc County. (Okla. Coop. Sur.).

PECAN CARPENTERWORM (Cossula magnifica) - ALABAMA - Heaviest infestation ever noted observed on 20 ten-year-old trees at Loxley, Baldwin County. Larvae ranged 1-15 and bored into trunk and main limbs in each tree. Fifty nearby acres about equally infested and spot treatments applied for 2 or more years. The 300 infested acres under complete treatment program for 9 years to date for diseases and insects. (Coats et al.).

PECAN LEAF PHYLLOXERA (Phylloxera notabilis) - ALABAMA - First infestation of season noted on seedling pecan tree leaves at Grand Bay, Mobile County. Some treatments applied. (Robinson et al.).

YELLOW PECAN APHIDS (Monellia spp.) - ALABAMA - Alates, stem mothers, and nymphs noted on numerous new growth leaves on pecans in Baldwin and Mobile Counties. Treatments applied. (Robinson et al.).

CITRUS

CITRUS WHITEFLY (Dialeurodes citri) - ALABAMA - First adults of season noted emerging from heavily infested citrus trees in Mobile County. Treatments repeated. (Robinson et al.).

FOREST AND SHADE TREES

PINE TIP MOTHS (Rhyacionia spp.) - MISSOURI - Emergence, mostly R. rigidana (pitch pine tip moth), underway in ponderosa pine planting in southwest area. Observations of infested tips showed empty pupal cases, pupae, and pre-pupae. (Munson). ALABAMA - First to third-instar R. frustrana (Nantucket pine tip moth) larvae heavy on new growth shoots of loblolly pine ranging 3-6 feet tall in Wilcox and Macon Counties. This is first report of season. (Hardy et al.).

SPRUCE BUDWORM (Choristoneura fumiferana) - MAINE - Moderate to heavy larval populations expected to have survived winter in all areas of State. (Gall).

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - KENTUCKY - Adults and larvae collected from various species of pine on private and State forested lands in Bell County March 19, 1975, by M. Matuszewski, J. Nordin, D. Barnett, S. Dalton, F. Whitaker, J. Winter, and P. Partin. Determined by J. Nordin and D. Barnett. Confirmed by P.H. Freytag and D.M. Anderson. This is a new State record. Infestations detected in Knox County March 20, 1975, by D. Barnett. This is a new county record. (Barnett).

DOUGLAS FIR TWIG WEEVIL (Cylindrocopturus furnissi) - OREGON - Larvae infested twigs of Douglas-fir in plantation near Drain, Douglas County. About 10 percent of 4,000 trees in planting exhibit injury. Weevil populations frequently increase following stress periods such as drought. (Capizzi).

COOLEY SPRUCE GALL APHID (Adelges cooleyi) - OREGON - Moderate to heavy on Douglas-fir seedlings near Canby, Clackamas County. Trees being grown by large wood products firm for use in reforestation. Up to 20 aphids per plant present on some seedlings. (Capizzi).

A SCIARID FLY (Bradysia coprophila) - FLORIDA - Larvae entered tap root and fed on it and lateral roots near soil line of longleaf pine (Pinus palustris) seedlings in pine nursery at Punta Gorda, Charlotte County. Collected February 21, 1975, by C.W. Chellum. Determined by R.J. Gagne. This is a new State record. About 50 percent of 1,000 seedlings damaged. Controls required; results satisfactory, no additional damage observed. (Fla. Coop. Sur.).

EASTERN TENT CATERPILLAR (Malacosoma americanum) - FLORIDA - Adults, mostly males, common in blacklight trap since April 1 at Gainesville, Alachua County. (Fla. Coop. Sur.). ALABAMA - Tents noted on wild cherry in Montgomery, Lee, and Tallapoosa Counties. Larvae migrated to and completely defoliated some rose bushes in Crenshaw County. (Lockhart et al.). MISSISSIPPI - Tents and larvae apparent by April 4 increased in size. Larvae now average well over 1 inch in Oktibbeha County. (Brook). TENNESSEE - "Hatch-out" noted in central and western areas, larvae observed feeding on foliage and blooms of cherry and plum trees. Damage noted on several home plantings of plum in central area. (Locke, Gordon). MISSOURI - First webs of season observed on wild plum in southwest area. Larvae first and second instars. (Munson).

FALL WEBWORM (Hyphantria cunea) - FLORIDA - First webs of season noted on sweetgum trees at Gainesville, Alachua County, April 5 by R.I. Sailer. (Fla. Coop. Sur.).

ELM LEAF BEETLE (Pyrrhalta luteola) - OKLAHOMA - Adults active on elm trees in Grady County. (Okla. Coop. Sur.).

A ROYAL PALM BUG (Xylastodoris luteolus) - FLORIDA - Outbreak occurred on royal palms (Roystonea regia) in Fort Lauderdale area of Broward County. Nymphs ranged 10-20 per square inch on bud leaf at base of fronds. Adults ranged 20-30 per frondlet (=leaflet). Pest caused bronzing on 200 trees examined, some trees showed severe bronzing and apparently dying. Collected and determined April 7 by J.A. Reinert. Species first reported in United States when heavy damage occurred on royal palms at Coconut Grove in Miami area of Dade County in March 1921. Next outbreak apparently did not occur until 1957 when it was abundant on royal palms in Fort Lauderdale area and on gulf coast from Bradenton (Manatee County) to Fort Myers (Lee County) primarily at Fort Myers and Punta Gorda (Charlotte County). Other collection records sporadic during period 1958 to 1964 in State, but no record on file since 1964. This thaumastocorid known only from Cuba and southern half of State. (Fla. Coop. Sur.).

MAN AND ANIMALS

SCREWWORM (Cochliomyia hominivorax) - Total of 14 cases reported from continental U.S. during period March 30-April 5, all from Texas. Total of 104 cases confirmed from Mexico. The cumulative total of laboratory-confirmed screwworms in the U.S. this calendar year is 43 cases and the lowest since 1971. Number of sterile flies released in U.S. this period totaled 39,512,400, all released in Texas. Total of 118,117,800 sterile flies released in Mexico. (Vet. Serv.).

HORN FLY (Haematobia irritans) - MISSISSIPPI - Continued to increase on Oktibbeha County cattle; averaged 40+ per head. (Robinson). TEXAS - Increasing on livestock in upper Coastal Bend area; moderate in Calhoun County. (Cole).

STABLE FLY (Stomoxys calcitrans) - MISSISSIPPI - Adults active and biting cattle in feed lots in Oktibbeha and Noxubee Counties. Averaged less than one per animal. (Robinson).

FACE FLY (Musca autumnalis) - KANSAS - Leaving hibernation quarters in buildings at Topeka, Shawnee County. (Bell).

A MOSQUITO (Aedes canadensis) - OHIO - Second-instar larvae noted in woodland pools in Summit County. (Ohio Dept. Health).

SHEEP KED (Melophagus ovinus) - ARIZONA - Infestations required dusting of some sheep in Maricopa County. (Ariz. Coop. Sur.).

SHORTNOSED CATTLE LOUSE (Haematopinus eurusternus) - OKLAHOMA - Cattle lice, mainly this species, heavy on cattle in Noble County, moderate to heavy in Muskogee County, and moderate in Haskell, Hughes, and Pontotoc Counties. (Okla. Coop. Sur.).

HOG LOUSE (Haematopinus suis) - OKLAHOMA - Moderate on hogs in Hughes County. (Okla. Coop. Sur.).

NORTHERN FOWL MITE (Ornithonyssus sylviarum) - MISSISSIPPI - Averaged less than 5 per bird on white leghorn laying hens in Oktibbeha County. (Robinson).

LONE STAR TICK (Amblyomma americanum) - OKLAHOMA - Light on cattle in Hughes County. Larvae active on warm days in Pushmataha County. (Okla. Coop. Sur.).

HOUSEHOLDS AND STRUCTURES

A PTINID BEETLE (Ptinus variegatus) - PENNSYLVANIA - Collected in home in Dauphin County April 4, 1964. Collector not given. Determined by T.J. Spilman. This is a new State record and most northern location species recorded in United States. (Henry).

SUBTERRANEAN TERMITES (Reticulitermes spp.) - NEVADA - Infestations in homes and office buildings much worse this spring than usual in Reno and Sparks area of Washoe County. (Ting).

STORED PRODUCTS

LESSER MEALWORM (Alphitobius diaperinus) - TENNESSEE - All stages of this species and Cynaeus angustus (larger black flour beetle) infested flaked soybeans in storage area at Memphis, Shelby County, December 18, 1974. Collected by M.W. Smith. Determined by T.J. Spilman. These are new State records. This is first report of these insects feeding on flaked soybeans. (Gordon, Bruer).

BENEFICIAL INSECTS

HONEY BEE (Apis mellifera) - OHIO - Prolonged cool weather restricted foraging. Most colonies survived winter in better than average condition with less consumption of honey and pollen stores than normal, and an early start on brood rearing. Further plant bloom delays and foraging will rapidly deplete food stores during this period of rapid brood growth. Beekeepers advised to check colonies to determine condition of queen, brood, and food supply. Supplemental feeding done in some colonies at less than average rate for time of year. (Connor). ALABAMA - Extremely active in crimson, white, and other clovers throughout central and southern areas. (McQueen).

CONVERGENT LADY BEETLE (Hippodamia convergens) - KANSAS - Small adult populations active in alfalfa in Sumner and Reno Counties. (Bell). OKLAHOMA - Ranged 0-3 per linear foot in wheat in southwest area and moderate in west-central area. Ranged light to occasionally moderate in wheat and alfalfa in the central counties. Averaged 2 per sweep in alfalfa in Kay and Tulsa Counties. (Okla. Coop. Sur.). ARKANSAS - Only occasional specimen found in wheat in northwest area. Coleomegilla maculata (a lady beetle) still found in winter quarters under pine straw at base of pine trees on farm in northwest area. (Boyer).

FLOWER BUGS (Orius spp.) - ALABAMA - These species along with Chrysopa oculata (goldeneye lacewing), Geocoris punctipes (a big-eyed bug), Hippodamia convergens (convergent lady beetle), Coleomegilla maculata fuscelabris (a lady beetle), braconid wasps, and other beneficials extremely heavy in all clover fields from Lee County south to Mobile County. (McQueen).

A BRACONID WASP (Lysiphlebus testaceipes) - OKLAHOMA - Parasitism of Schizaphis graminum (greenbug) in wheat ranged 5-60 percent in southwest counties and reported moderate in west-central counties. Parasites noted in all wheatfields checked in Canadian, Grady, McClain, Pottawatomie, and Garvin Counties, with 5-10 percent parasitism of greenbug found in some fields. (Okla. Coop. Sur.).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

CEREAL LEAF BEETLE (Oulema melanopus) - OHIO - No feeding damage noted in fields of winter wheat in Clinton, Green, and Highland Counties. Overwintering adults usually active by this time. (Leibee).

RED IMPORTED FIRE ANT (Solenopsis invicta) - ARKANSAS - Mounds ranged 64-112 per acre in area of Ashley County. (Wall).

WHITEFRINGED BEETLES (Graphognathus spp.) - ALABAMA - Infested and killed 10-20 percent of 5 to 8-inch tall corn in two fields in Baldwin and Covington Counties. (Coats, Johnson).

General Vegetables - BEET ARMYWORM (Spodoptera exigua) and LEEK MOTH (Acrolepia assectella) larvae moderate to heavy in small green onion plantings at Pearl City, Oahu. About 40 percent of plants infested by S. exigua, 75 percent by A. assectella. Infestations and damage by S. exigua light on broccoli in same area. CABBAGE WEBWORM (Hellula rogatalis) larvae moderate in small plantings of mustard cabbage, daikon, and Chinese cabbage at Pearl City. Larvae ranged 1-2 in each infested head, about 45 percent of plants infested. Species usually found in unsprayed plantings; not usually problem where crops treated regularly. HAWAIIAN BEET WEBWORM (Hymenia recurvalis) infestations and damage heavy on Swiss chard at Pearl City; larvae and adults present. Species generally not considered pest as it is normally found feeding on Amaranthus spinosus (spiny amaranth), a weed. TOBACCO FLEA BEETLE (Epitrix hirtipennis) caused heavy damage to eggplant and tomato in gardens at Pearl City. Infestations light, 1-3 adults per leaf. Leaves appeared to have been damaged more than 7 days previously. (Mau).

Fruits and Ornamentals - An APHID (Eulachnus sp.) light on Japanese black pine at Hilo, Hawaii. This is a new island record for this aphid, which was first found in the State at Honolulu in April 1973 infesting Pinus sp. (Kashiwamura, Yoshioka).

Miscellaneous Pests - Numerous males of a NOCTUID MOTH (Leucania loryei) found in light trap collections (January 1975) from Hickam Air Force Base, Oahu. Species of interest because it feeds primarily on gramineous hosts including sugarcane. It has been reported as a pest of sugarcane in the Philippines, Taiwan, Mauritius, and considered minor pest of this host in Fiji and Madagascar. Adults have been periodically collected on Oahu in blacklight traps. Detection surveys in Honolulu International Airport and Hickam Air Force Base areas have failed to reveal breeding of this noctuid. (Beardsley, Mau).

DETECTION

New State Records - LARGER BLACK FLOUR BEETLE (Cynaeus angustus) - TENNESSEE - Shelby County. (p. 320). LESSER MEALWORM (Alphitobius diaperinus) - TENNESSEE - Shelby County. (p. 320). PEPPER WEEVIL (Anthonomus eugenii) NORTH CAROLINA - Harnett County. (p. 317). A PTINID BEETLE (Ptinus variegatus) - PENNSYLVANIA - Dauphin County. (p. 320). A SCIARID FLY (Bradysia coprophila) - FLORIDA - Charlotte County. (p. 319). SOUTHERN PINE BEETLE (Dendroctonus frontalis) - KENTUCKY - Bell County. (p. 318).

New Island and County Records - AN APHID (Eulachnus sp.) HAWAII - Hawaii Island (p. 322).

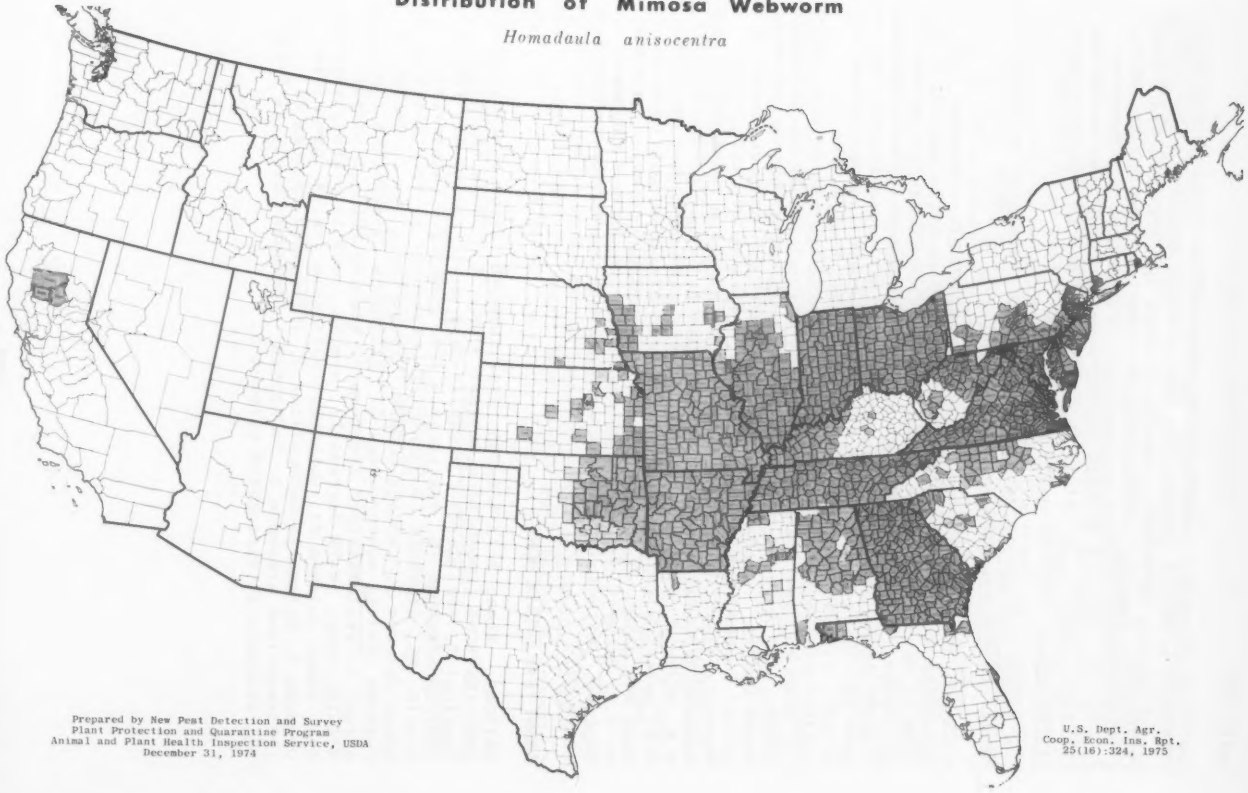
A LEAFHOPPER (Scaphoideus immistus) - KENTUCKY - Material for determing distribution of this cicadellid in State solicited from 27 major museums in North America. Label data and number of specimens (in parentheses) of positive determinations as follows: Lantern trap, Lexington, Fayette County, (1) June 20 and (1) June 27, 1910, collector(s) not given; Louisville, Jefferson County, (1) June 17 and (1) July 23, 1940, host(s) and collector(s) not given; Berea, Madison County, (1) June 14 and (1) June 25, 1941, J.S. Bangson, host not given; Murray, Calloway County, (1) July 18, 1941, L. Spann, host not given; Brandenburg, Meade County, (1) September 4, 1941, host and collector not given; Concord grape, Warren County, (4) June 22, 1971, D.E. Barnett; blacklight trap, Hickman County, (2) July 15, 1971, D.E. Barnett; general sweeping, Graves County, (1) July 16, 1971, D.E. Barnett; on Vitus, Daviess County, (1) September 26, 1971, D.E. Barnett; Hopkins County, (1) June 12, 1972, D.E. Barnett, host not given. Specimens determined by P.H. Freytag. Confirmed by D.E. Barnett. Calloway, Daviess, Fayette, Graves, Hickman, Hopkins, Jefferson, Meade, and Warren are new county records. (Barnett).

LIGHT TRAP COLLECTIONS

ARIZONA - Mesa, 3/31-4/5, BL, ARMY CUTWORM (Euxoa auxiliaris) 6, BEET ARMYWORM (Spodoptera exigua) 3, BLACK CUTWORM (Agrotis ipsilon) 2, VARIEGATED CUTWORM (Feltia subterranea) 25, YELLOW-STRIPED ARMYWORM (S. ornithogalli) 1. FLORIDA - Gainesville, 4/4-10, BL, ARMYWORM (Pseudaletia unipuncta) 1, beet armyworm 5, black cutworm 1, CABBAGE LOOPER (Trichoplusia ni) 1, GRANULATE CUTWORM (Feltia subterranea) 57, SALTMARSH CATERPILLAR (Estigmene acrea) 1, yellowstriped armyworm 6. MISSISSIPPI - Stoneville, 4/4-10, temp. 34-72 degrees F., precip. 1.09 in., 2BL, armyworm 547, black cutworm 74, BOLLWORM (Heliothis zea) 4, granulate cutworm 3, saltmarsh caterpillar 1, variegated cutworm 85, yellowstriped armyworm 1. TENNESSEE - Hardeman County, 4/7-11, BL, armyworm 5, variegated cutworm 3.

Distribution of Mimosa Webworm

Homadaula anisocentra



Prepared by New Pest Detection and Survey
Plant Protection and Quarantine Program
Animal and Plant Health Inspection Service, USDA
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WEATHER OF THE WEEK ENDING APRIL 14

Reprinted from Weekly Weather and Crop Bulletin supplied by National Weather Service, NOAA

HIGHLIGHTS: Old Man Winter seems reluctant to release his grip on the Nation. For the second week in a row almost all of the United States averaged below normal temperatures. The exceptions were the extreme Southeast and Northwest. Heavy rain on the central gulf coast has caused record floods in that area. Lesser flooding occurred in northeast Texas as a result of moderate to heavy rains.

PRECIPITATION: The week began Monday with another Colorado Low deepening as it moved northeastward. South of the Low showers and thundershowers occurred in the High Plains of Texas and Kansas. Occasional rain fell throughout the Plains and snow piled up in Montana, Wyoming, and the Dakotas. A severe blizzard covered Montana east of the Continental Divide as winds to 50 m.p.h., heavy snow, and temperatures of 10 degrees were reported. Some rain and snow at higher elevations fell in Arizona. By Tuesday, the Low had moved to western South Dakota and was beginning to weaken. Moderate to heavy snows were accompanied by high winds in the Dakotas, Montana, and Wyoming. A frontal system in southeast Texas triggered rain and showers northward throughout the central Plains. Heavy rain with thunderstorms occurred in east Texas and caused some flooding. Rains and thunderstorms were reported eastward to Alabama. Elsewhere, showers brought more moisture to the west coast from central California to Oregon. On Wednesday, all that was left of the storm that had brought severe weather to the Plains and the northern Rockies was a weak Low in Nebraska. The storms dying gesture brought snow mixed with rain to northern Iowa, southern Minnesota, and southwest Wisconsin. Later, heavy snow fell in South Dakota. Another disturbance moved into the Southwest. Snow fell in the mountains of southern California and into central Arizona. Meanwhile, the frontal system on the gulf coast spread rain and snow to the upper Mississippi Valley with thunderstorms confined to the lower Mississippi Valley and the gulf coast. Early morning hailstorms in Mississippi produced golf-ball sized hail. By midday, thunderstorms were common along the gulf coast from Louisiana to Florida and were spreading northward to the lower Ohio Valley. Flooding began along many streams in the South. Thursday saw only light snow in the northern Plains. The Low pressure area in the Southwest was producing showers of rain or snow from southern California to New Mexico. Snow in eastern New Mexico spread to the Texas Panhandle as the day progressed. Serious flooding occurred along the streams in Arkansas and east Texas. The dominate storm system was now the frontal wave which had moved to southern Alabama. Showers, rain, and thunderstorms extended northeastward into South Carolina. Moderate rain fell from east Texas to Florida with the most severe weather in southern Alabama. Tornadoes added to the danger of the heavy rain which was swelling streams out of their banks. After 24 to 36 hours of heavy rain, the storm began to diminish in the South by Friday, but rain continued, heavy at times, from northern Florida to North Carolina. Serious flooding continued in Alabama. Elsewhere, an upslope flow brought snow showers to Colorado and Wyoming.

Scattered showers of rain or snow fell in Nevada and Utah. On Saturday, a High pressure center in the Kansas-Oklahoma area pushed the front into the Gulf of Mexico and southward through Florida. Showers occurred along the front as it moved through Florida. Elsewhere, the disturbance in the Southwest continued. Snow fell in eastern New Mexico and spread into west Texas and north to the Panhandle and into southeast Colorado. Sunday dawned as a welcome bright, clear day in the Southeast. However, another wave formed on the coast of Texas threatening more severe weather for the South. The area of general Low pressure in the Southwest caused a mixture of rain or snow in Arizona, Nevada, and Utah. Rain to southwest Texas spread east and north to Oklahoma, Kansas, and Nebraska. Occasional rain or snow fell in the Dakotas.

TEMPERATURE: Warm air flowed northward into the Plains on Monday and cold air moved southward into the Rockies. McAllen, Texas, measured 74 degrees and Cut Bank, Montana, had a high of 3 degrees. On Tuesday, temperatures in the 50's reached as far north as eastern South Dakota, while cold air continued to innundate the Rocky Mountain area from Montana to Arizona. By Thursday, temperatures in the chilly 30's were the high readings in the upper Plains and Great Lakes area. The low 60's in southern Arizona was more than 15 degrees below normal for this time of the year. It was chilly over much of the Nation on Friday with freezing weather pushing into the Ohio Valley, central Plains, and southern Rockies. Cool weather continued over most of the Nation on Saturday and Sunday. Maximum temperatures in the 30's were dominate across the Northern States, and portions of northeast Texas and Louisiana only reached the 50's.

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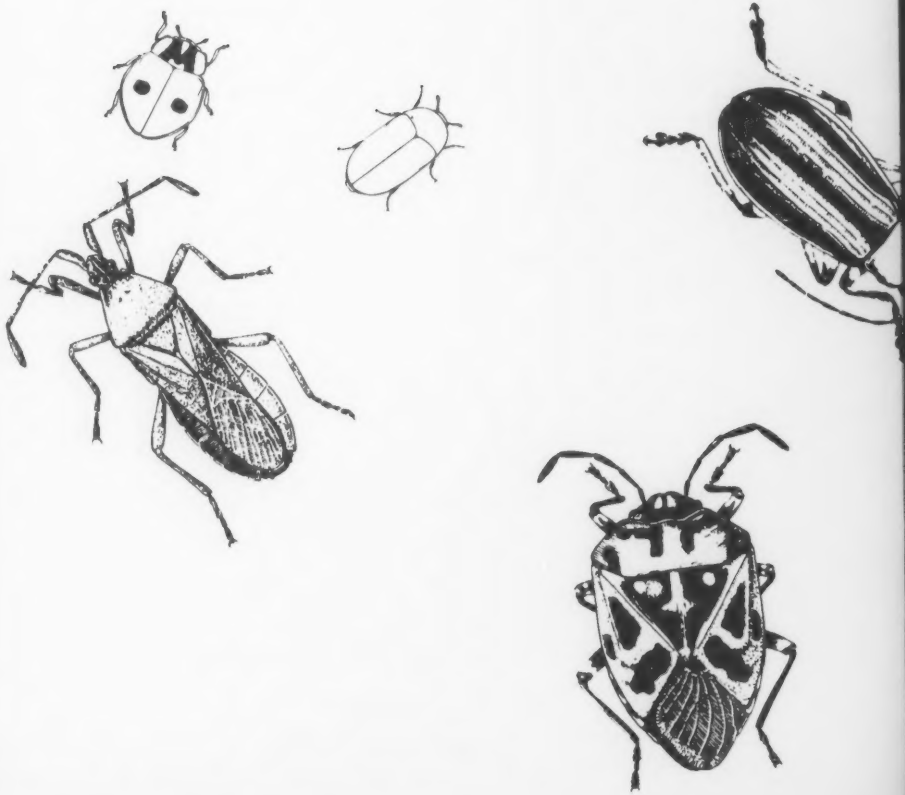
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